

CLAIMS

Sub B7
1. A method to monitor the wear of a rapier band (1) of a rapier loom characterized in that the temperature of the rapier band (1) and/or of a component (3, 12) in contact with the rapier band is analyzed as a wear characteristic value of the rapier band (1).

2. Method as claimed in claim 1, characterized in that the temperature of the rapier band (1) is measured directly.

3. Method as claimed in claim 1, characterized in that the temperature of the rapier band (1) is measured indirectly.

Sub A1
4. Method as claimed in either of claim 1 or 3, characterized in that the temperature of a component (3, 12) guiding the rapier band (1) is measured.

Sub B7 (cont'd)
5. Method as claimed in claim 4, characterized by measuring the temperature of a guide element (3, 12) which maintains the rapier band (1) engaged with a drive wheel (2).

Sub A2
6. Method as claimed in one of claims 1 through 5, characterized by measuring the temperature differential between the first directly or indirectly detected temperature of the rapier band and a second temperature detected at a measuring site different from the site of the first temperature.

Sub B7 (cont'd)
7. Device to monitor the wear of a rapier band (1) of a rapier loom, characterized by an analyzer (8) analyzing, as a wear characteristic value of the rapier band (1), the temperature of the rapier band (1) and/or of a component (3, 12) making contact with the rapier band (1).

B7
(cont'd)

8. Device as claimed in claim 7, characterized in that a first temperature sensor (6) directly or indirectly detecting the temperature of the rapier band (1) and a second temperature sensor (7) are connected to the analyzer (8), said second temperature sensor being spaced away from the first temperature sensor.

9. Device as claimed in claim 8, characterized in that the first temperature sensor (6) is associated with a guide element (3, 12) which maintains the rapier band (1) engaged with the drive wheel (2).

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A3

10. Device as claimed in one of claims 7 through 9, characterized in that the guide element (3, 12) includes a thermally conducting support receiving the first temperature sensor (6) at a first site near the rapier band (1) and the second temperature sensor (7) at a site away from the rapier band (1).

11. Device as claimed in one of claims 7 through 10, characterized in that an input unit (10) to apply a comparison value is associated with the analyzer (8).

12. Device as claimed in one of claims 7 through 11, characterized in that the analyzer (8) is connected to a display (9) and/or to a control system (11).